

REMARKS

Claims 1-9 and 13-22 are now pending in the above-referenced patent application. Applicants respectfully request further consideration of these claims, in view of the amendments set forth above and the following remarks.

Cancelled Claims

Claims 10-12 have been cancelled solely for commercial reasons and to advance the prosecution of the instant case. Applicants expressly reserve the right to refile the cancelled claims, without prejudice, in a continuing application. Applicants' cancellation of these claims should not, in any way, be considered as an admission with respect to any outstanding rejections applying to such claims, and Applicants hereby expressly deny any such interpretation. Likewise, Applicants cancellation of these claims should not, in any way, be considered as a surrender of any subject matter covered by the cancelled claims or any equivalents thereof, and Applicants hereby express their intent to pursue patent coverage for such subject matter and equivalents thereof.

Amended Claims

Claims 1 and 3 have each been amended to clarify, without change in the substantive scope thereof, the relationship between the base (formerly the "first portion" of the base), the well plate (formerly the "second portion" of the base), and the well plate. These claims 1-3 have also been amended for internal consistency. Support for these amendments can be found throughout the specification, including for example in Figures 1-3, also at page 2, line 15 through page 3, line 13, and also at page 9, lines 6-13.

Claim 2 has been amended to claim a certain preferred embodiment of commercial interest to Applicants. In particular, the claim requires an inert member situated in each of the plurality of electrochemical cells. Support for this amendment can be found throughout the specification, including for example in Figures 3 and 4, and also at page 8, line 28 through page 9, line 6, and also at page 9, line 14 through page 10, line 13.

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Claims 4, 5, 8, 9, 13, 17 and 20 have been amended with respect to claim dependency, without change in the substantive scope thereof. Specifically, claims 4, 5 and 13 are amended to depend from claims 1 and 2. Claims 8 and 9 are amended to depend from claim 1 (rather than claim 2). Claim 13 has also been amended for clarity, without change in the substantive scope thereof. Claim 17 has been amended to depend from claim 15 (rather than claim 3), as suggested in the Office action. Claim 20 has been amended to depend from claim 13 (rather than claim 18).

No new matter has been added.

New Claims

New claims 21 and 22 have been added to claim certain preferred embodiments of the invention. Support for these claims can be found throughout the specification, including for example in Figures 1-3 and also at: page 2, line 15 through page 3, line 13; page 3, line 29 through page 4, line 5; page 6, line 27 through page 7, line 3; and at page 9, lines 6-13.

No new matter has been added.

Objection to Claim 17

Claim 17 has been objected to because "said multi-pin connector" lacks antecedent basis.

This basis for rejection is obviated in view of the amendment to claim 17 (to depend from claim 15 rather than claim 3, as suggested by the Examiner).

Rejections Under 35 U.S.C. § 103(a) (Donne in view of Warren *et al.*)

Claims 1-14, 16, and 18-20 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Donne (US 6,468,410) in view of Warren et al. (US 6,187,164).

Applicants respectfully traverse this basis for rejection, in view of the aforementioned amendments and the following remarks.

Claims 1 and 3

Each of independent claims 1 and 3, as amended, recite an electrochemical cell apparatus comprising an assembly that comprises a base, a printed circuit board supported on the base, and a well plate disposed adjacent to (*e.g.*, above) the printed circuit board. The well plate has a

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plurality of individual, isolated through holes defining passages therein. The well plate and printed circuit board are assembled to define a plurality of individual, isolated electrochemical cells supported by the base.

The references relied upon in the Office action do not teach all the required components of the claimed apparatus. In particular, these references do not disclose a well plate having through holes assembled with a printed circuit board to form a plurality of electrochemical cells.

Donne discloses, in the embodiment of Fig. 2, a base (10) and a plurality of individual electrochemical cells supported by the base (10), for electrodeposition of working electrode sample materials. Unlike the present invention, however, these electrochemical cells are provided by *individually* mounted assemblies (each assembly comprising a separate electrode holder (12), working electrode (22), and housing (28)). In a separate embodiment, shown in Fig. 3, Donne discloses a single, *common* electrochemical cell comprising a base (10), multiple working electrodes (22) and common housing (50). Hence, Donne does not disclose either a well plate or a printed circuit board, or the assembly thereof into an array of electrochemical cells.

Warren et al. do not make up for the deficiencies of Donne. Warren et al. disclose an array of individually addressable electrodes (comprising an array 10 of electrodes 12 fabricated on an inert substrate 14 connected to contact pads 13 with wires 16), and also a printed circuit board 112 in electrical communication with the electrode array. A *single* electrochemical cell is disclosed, in the embodiment of Fig. 3, using a deposition head 50. In another embodiment, shown in Fig. 4A through 4E, the reference discloses a single, *common* electrochemical cell comprising the electrode array, a common housing 82, and end members 84. Hence, Warren et al. do not disclose either a well plate or assembly of a printed circuit board therewith to form individual, isolated electrochemical cells.

Accordingly, the Office action does not establish a *prima facie* case of obviousness (even assuming *arguendo* that a person of ordinary skill in the art would have combined the references in the manner suggested by the Examiner), because the resulting structure would not include all of the limitations of claims 1 and 3. The law is clear that “to establish a *prima facie* case of obviousness, all the claim limitations must be taught or suggested by the prior art.” See MPEP Sec. 2143.03; *In re Royka*, 180 USPQ 580 (CCPA 1974). As discussed above, however,

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technically and commercially significant features of the presently-claimed inventions are not taught or suggested by the prior art.

Claim 2

Independent claim 2, as amended, requires an electrochemical cell apparatus comprising a plurality of individual, isolated electrochemical cells formed in or supported by a common base. Each of the plurality of electrochemical cells further comprises an *inert member* for constraining the sample electrode and allowing fluid communication between the sample electrode and an electrolyte. As described in the specification, for example, such an inert member can advantageously constrain the sample electrode material (*e.g.*, effecting separation from the bulk electrolyte), while still providing for fluid communication with the electrolyte. Also, in some preferred embodiments, such membrane can facilitate pressing of sample electrode materials (*e.g.*, in powder form) to form the sample electrode.

The references relied upon in the Office action, considered alone or in combination, do not disclose, teach or suggest the inert member required by the invention defined by Claim 2.

Accordingly, the Office action does not establish a *prima facie* case of obviousness.

Therefore, claims 1, 2 and 3, and claims 4-9 and 13-20, each depending from one or more thereof, are patentable over Donne in view of Warren et al. Applicants respectfully request that this basis for rejection be withdrawn with respect to such claims.

Rejections Under 35 U.S.C. § 103(a) (Donne in view of Warren et al. and Maynard)

Claims 15 and 17 have been rejected under §103(a) as being unpatentable over Donne in view of Warren et al. and in further view of Maynard (US 4,850,899).

Applicants respectfully traverse this basis for rejection, in view of the aforementioned amendments and the following remarks.

Each of claims 15 and 17 depend directly or indirectly from claim 3, and are patentable for the same reasons articulated above in connection with claim 3.

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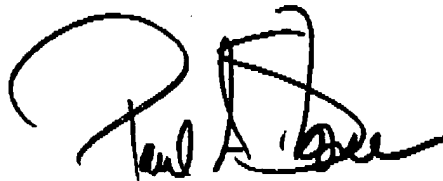
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CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

The Examiner is hereby authorized to charge the fees required in connection with this Amendment B to Deposit Account No. 50-0496, in accordance with the Transmittal submitted herewith. The Examiner is also authorized to debit any other fees required in connection with this application, or to credit any overpayment of fees in connection with this application to Deposit Account No. 50-0496.

Respectfully submitted,

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